DEVOTED TO AGRICULTURE AND ALL ITS KINDRED ARTS AND SCIENCES.

Agriculture not only gives riches to a nation, but the only riches she can call her own.—JOHNSON.

VOL. II. SATURDAY, MAY 25, 1850. NO. 11.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

WORK FOR THE SEASON.

At this busy season farmers have more work before them than they can perform in due time, and they may hardly need any suggestions on the subject. In some sections the sowing of grain is not completed, though it ought to have been attended to last month, had the season been favorable. Wheat, rye, oats, and barley generally succeed best with early sowing, as they are less liable to rust. Yet some sow wheat late, at the risk of the rust, in order to scape the ravages of the grain worm; and often this appears to be a judicious course. Millet and buckwheat succeed best when sowed late.

Since the rot has prevailed, it is better to plant potatoes early; yet it will answer to plant late. We planted some last year as late as the middle of June, and on very moist land; yet they succeeded well, as they rotted but very little. So in regard to this subject, "Better late than never." It is impossible for a farmer to do every thing at the most suitable time, especially in a backward spring.

The sooner the seed is sowed for root crops the better, after the 20th or 25th of May, excepting for turnip, which may be sowed from the middle of June to the first of August, according to the variety. This crop is admirably adapted to late sowing, when it is too late for beets, carrots, or parsnips. This is the month for planting Indian corn; and when it is planted the last of the month, or early in June, it is better to plant rather early kinds, especially on frosty lands. In very warm summers this precaution may not be necessary, but it is well to prepare for seasons as they usually occur.

In destroying weeds, and loosening and pulverizing the soil around plants, a great deal of labor is necessary, and frequently before planting is completed. When this labor is delayed, the expense of hoeing is much increased, and the growth of tender plants very much retarded.

Newly transplanted trees should have the earth around them formed into a basin to hold the water; and it is important to see that a part of the top of the trees is cut off. In some cases trees seem to start so reluctantly, that it is necessary to cut off half the top; and when they have been removed under very unfavorable circumstances, it is sometimes necessary to cut off all the top, to save them.

In pruning fruit trees, we prefer cutting off large limbs in August or September, or later in the fall, as the wounded part will remain sound. But at this season it is necessary to remove dead limbs, and those that interfere, to thin out tops that are too dense, and cut off sprouts and small branches that are giving the tree a wrong direction.

Most farmers, in the hurry of business which almost always occurs at this season, neglect to have a good variety of vegetables and small fruits for their family use. Every one should have a good supply of early and late sweet corn, early potatoes, early beans, both for shell and string; a variety of peas for different seasons, early and late cucumbers and melons, both musk and water; early and late squashes, cabbages, and turnips; early and late parsnips; also, rhubarb, asparagus, lettuce, radish, spinach, cress, and various other things, too numerous to mention. There is still time to attend to most of these vegetables. Small fruits, especially those that are early, should by no means be neglected. Strawberries, raspberries, thimbleberries, gooseberries, currants, blackberries, cranberries, and other small fruits should receive attention, as well as the larger kinds. They come into bearing very early, and yield large crops of fruit, which is very acceptable in hot weather, and saves much expense for meat, butter, &c., which are far less palatable and wholesome. These small plants may be moved at this season, by taking up much soil with the roots.

BONE MANURE.

In reply to the inquiries of "S. P." in regard to the prices of ground bone, and where it is to be obtained, we would remark that what is commonly called ground bone, is really only crushed bone; a part of it is fine, but the greater part is in small pieces, not readily available to the plant; hence it has been a practice in England, and by a few cultivators in this country, to use sulphuric acid, and other

agents, in decomposing the bone, and rendering it readily available to the growing plant, by which a much less quantity is required. If it be not decomposed, the large pieces will remain many years, serving the purposes of a manure for a longer time, but in a less degree. See previous articles in this paper on the decomposition of bone.

As we have not had an opportunity to make experiments in decomposing bones, and the cost of doing it with sulphuric acid is considerable, we use what is called wet bone, which is very fine, as it is composed of sawdust, made by a rotary saw driven with great velocity. This costs but little more per barrel than crushed bone. The wet bone is generally kept for sale by Messrs. Nourse, Mason, & Co. It may doubtless be obtained in other sections, where bones are used as a raw material in manufacture. The price of wet bone is $2 25 per barrel. Dry bone dust is a nice, pure article, which is given to cows for the *bone disorder*. On this subject, see American Veterinarian; also, the first volume, and past numbers of N. E. Farmer.

Old lands usually become exhausted of bone earth or phosphate of lime, and for such, bone manure is valuable. It is usually the most valuable on dry soils, and particularly for the turnip crop, and for grape vines. But it is generally beneficial to most crops that the farmer or gardener cultivates. As to its profit, much depends on the advantages of procuring it, its price, and the price of other manures.

As S. P.'s soil is a deep, black muck, or vegetable mould, it would be well to use some lime or ashes to destroy the acid which is probably in it; and if it is rather moist or wet, drain it, and add gravel or sand to improve the texture. As bone manure is composed largely of the phosphate of lime, it tends to correct acidity; but merely for this purpose, it is not usually so cheap as ashes or lime.

STEEPS FOR SEED CORN.

This is a subject that has received considerable attention; and many experiments have been made on it, with various success. Some have found an advantage from steeps, as they have thought, both in promoting the growth of the plants, and in protecting the corn from vermin; others, again, have received no advantage, and a few, still more unfortunate, have destroyed the seed. Steeps should be used with great caution. When corn is planted late, soaking the seed in water twenty or thirty hours, or in some suitable steep a proper time, will cause it to vegetate earlier. We select a few items on the subject.

Preparation for Seed Corn. — I promised you last year, while you were connected with the *Farmer*, to send you a recipe for republication, in regard to the preparation of *seed corn*. I took it from that journal several years since, and have used it with much satisfaction.

"Dissolve one pound of sal ammoniac in eight quarts hot water. When reduced to blood heat, put one peck of seed corn into it. Let it remain eighteen hours, roll in plaster, and plant it."

I prefer not to let the corn remain in the preparation more than sixteen hours, as, if it remains a *little too long*, it will not vegetate. It should be planted *soon* after it is prepared. I have used this recipe some four or five years, and with the best results. Corn prepared in this way will be ready for hoeing at the *same time* as corn planted without any preparation — *one week earlier*, unless it happens to be *very wet weather*. When this is the case, the sal ammoniac is of little value. I have raised eighty bushels to the acre of corn prepared in this way. And I have never been troubled with the crows pulling up the seed.

Perhaps I should add that sal ammoniac can be purchased for twenty-five cents per pound, although some merchants *ask* four and even six shillings.

S. P. CHAPMAN.

Clockville, Mad. Co., N. Y., *May*, 1850.

—*Rural New-Yorker.*

Soaking Corn in Saltpetre. — I had the benefit of soaking corn in saltpetre, to plant, well tested last year, on a small piece of ground, planted late. I had not enough soaked to plant all the piece. Where it was not soaked, the blackbirds pulled out about one third; where it was soaked, they seldom touched a hill. But what was most peculiar, there happened to be one row planted with dry corn between two rows that were soaked; of the dry, they took several hills clean, and, altogether, about one third of the row; while they did not take more than one hill of the two saltpetre rows.

JAMES C. TAYLOR.

Atlantic, N. J.

—*American Agriculturist.*

FOOD RAISED ON AN ACRE.

The amount of human food that can be produced upon an acre is worthy of great consideration. One hundred bushels of Indian corn per acre is not an uncommon crop. One peck per week will not only sustain life, but give a man strength to labor, if the stomach is properly toned to that amount of food. This, then, would feed one man 400 weeks, or almost eight years!

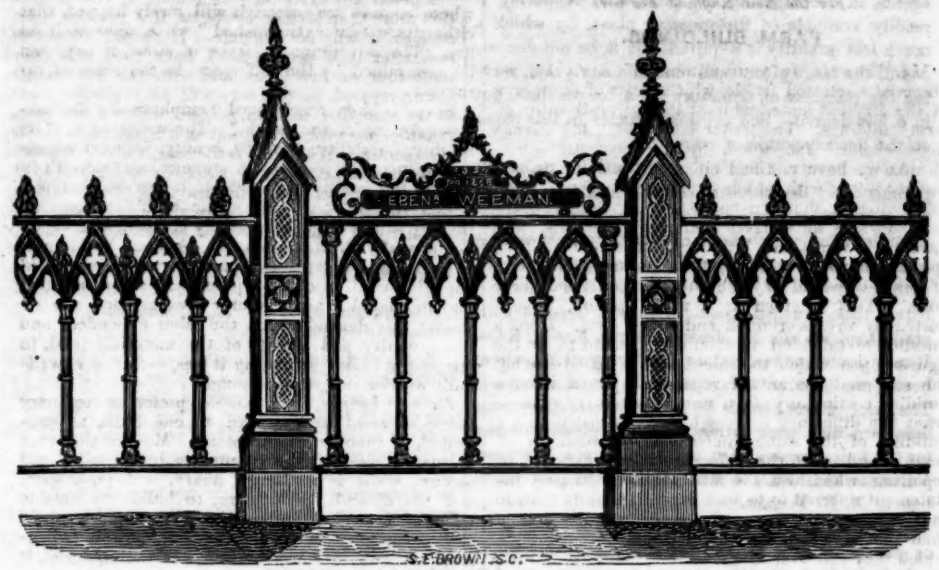
Four hundred bushels of northern potatoes can also be raised upon an acre. This would give a bushel a week for the same length of time; and the actual weight of an acre of sweet potatoes is 21,344 pounds, which is not considered an extraordinary crop. This would feed a man six pounds a day for 3557 days, or nine and two-thirds years!

To vary the diet, we will occasionally give rice. This has been grown at the rate of ninety-three bushels to the acre over an entire field. This, at forty-five lbs. to the bushel, would be 4185 lbs.; or, at twenty-eight lbs. to the bushel, when hulled, 2604 lbs., which, at two pounds a day, would feed a man 1302 days, or more than three and a half years!

Upon reflection, it is not very wonderful that so many non-producers are able to find food, when we see how many mouths one laborer can fill.—*American Agriculturist.*

Nature is a book of sweet and glowing purity, and on every illumined page the benevolence and goodness of God are divinely shown. Study its pages, and learn wisdom.

As well pass a kaleidoscope from hand to hand, and expect no trembling touch will alter its aspect, as to think to hear a story from mouth to mouth literally and accurately repeated.



ORNAMENTAL IRON FENCE.

This cut represents an iron fence, recently got up by Mr. Ebenezer Weeman, Nos. 16 and 18 Merrimac Street, Boston. This fence is in Gothic style, and is very ornamental. It is well adapted to cemeteries, front yards, and other purposes. It is neat, of medial lightness, and well proportioned.

Specimens of this fence may be seen in Mount Auburn, on the lot (1268) of the late Hollis Thayer, on Pine Avenue. Mr. Weeman makes iron fences of various descriptions, and he has some of the best original patterns, from recent designs.

For the New England Farmer.

N. Y. STATE AGRICULTURAL SOCIETY.

Mr. Cole: This society will hold its next show and fair at Albany, the first week in September next, commencing on the 3d, and continuing four days. It will, as we learn, be held on spacious grounds provided for it north of the city, and at a convenient distance between Albany and Troy. Ample arrangements are making for the comfort and convenience of the large collection anticipated at this gathering; and by the spirit manifested by our Albany friends, we are confident they will make it the greatest thing for farmers ever witnessed in America.

As this fair is brought almost to the line (which we rejoice is only an imaginary separation, having no control over social feelings and general harmony) between New York state and New England, we hope all our Yankee farmers will go and witness the triumph of our sister commonwealth; and that they will not only go themselves, but that those who can will take their wives and their little ones; their flocks and their herds; their useful and beautiful fabrics; their fruits, so joyous to the eye and refreshing to the taste; their beautiful flowers, sent to gladden the heart, and proclaim the skill and wisdom of their Creator, to beautify and interest the anniversary, and cement the bonds which naturally unite men engaged in the same noble offices, and say to all men that we are brethren, too closely associated to be moved by petty jealousies or sectional advantages.

The exhibition will undoubtedly be worth ten times the cost incident to attending it, but its value will be greatly increased to those who carry in for exhibition; for all such will naturally feel, however small the amount they exhibit, that they have a part and a lot in the matter, beyond that of being *mere lookers on*, to witness the triumphs of others. None need to fear for the safety of articles exhibited, for due care, we are confident, will be taken, by a thorough police, to have every thing, even the smallest, kept safely out of harm's way. We again repeat the hope and expectation, that the farmers of New England will all set themselves about contemplating an excursion to the New York State Cattle Show and Fair at Albany next September.

April, 1850. W. B.

Deep planting is always to be avoided. We have an illustration of this error in our garden — two trees side by side, which were planted five years ago, and were then of equal size. One was planted as deep as it previously stood, and is now twice as large as the other, which was planted a foot deeper, and has produced no fruit, while the former has yielded abundantly for the last two years. — *Granite Farmer.*

Jenny Lind was offered some thirty thousand pounds to sing at the Imperial Concerts at the court of Russia. Jenny's significant negative to the offer was, "Hungary." Great is the triumph of genius, when the nightingale is too much for the eagle.

Set out a Tree. — Let no one who has a spot on which to place it, neglect to set out at least one tree this spring.

For the New England Farmer.

FARM BUILDINGS.

Mr. Editor: In your number of April 13, we observed a selected article, which treats of the merits of the different materials used in the construction of farm buildings. The writer enumerates the advantages claimed for wood, by its advocates — "its cheapness, beauty, the facility of obtaining it, and the readiness with which it can be repaired;" and asks whether they can be sustained. As to cheapness, he says he believes that "most farmers, who have their farms and buildings in decent condition, spend as much in repairing the structures for a term of years, as would pay the interest upon good stone ones." This is given as a mere opinion, unsupported by any ascertained and stated facts. Upon a question of this kind we should be pleased to see the figures upon which the calculation is based — what the supposed amount of repairing upon a wooden building costing any given sum, for a term of years — what the difference in cost between constructing a building of the same dimensions, of wood, or of stone — and what the difference in the expense of repairing which each would require. Taking the statement referred to to be correct, it admits that, in the first instance, the cost of stone is much greater than that of wood, and that farmers have a capital, which they can well invest in the manner proposed; while the fact that the former requires repairs as well as the latter, is entirely overlooked. The percentage for repairs upon substantial wooden buildings, always kept in decent condition, (and this will be the cheapest,) for a series of years, according to my experience, would form but a small capital to meet even the interest upon the *difference in costs* between those of wood and those of stone, supposing the latter required no repairs. But much of those expenses having been incurred for interior work, and roofs, doors, windows, &c., would have been necessary, of whichsoever of those materials the buildings had been constructed.

The writer referred to says, "When a man sells his farm with wooden buildings upon it, such as are generally found in New England, it brings no higher price per acre, than if destitute of buildings altogether;" that is to say, the buildings being wood, they do not enhance the value of the estate. This is absurd. No single instance, we venture to say, can be produced to corroborate this statement. Take two farms of equal size and of equal goodness, the one entirely destitute of every structure, and the other having upon it such wooden buildings "as are generally found in New England," would any judicious man, who is called upon to appraise the estates, appraise them at the same value? Would not any person wishing to buy, be willing to pay more for the one than the other? Supposing a farm is offered for sale, with good wooden buildings upon it, and a person offers, and is willing to pay, what is considered, by competent judges, its value, and pending the contract those buildings should be consumed by fire, would he afterwards pay as much for the remainder of the estate? It is true, that farm buildings, whatever may be the materials used, will seldom be estimated and sell at their costs. Rarely will a farm in good condition bring the costs of its improvements, putting the ordinary charges upon labor. Indeed, we know of good farms, which it is said would not sell for more than an amount sufficient to pay for the stone fences constructed upon them, at such a computation.

Then the liability of wooden buildings to take fire is considered; and this is regarded as a "*serious* objection in the country," on account of the scarcity of fire-engines. Stone structures are certainly more secure from fire from without, but not within; and where engines are scarce, it will rarely happen that either "are ever extinguished" when once well on fire. The advantage in favor of stone, if any, can be ascertained by the difference in the rates of insurance.

Stone is then pronounced "emphatically the material for us at the north." The writer says, "Its solidity, durability, strength, beauty, imperviousness to moisture, its coolness in summer, and warmth in winter, the facility with which it can be obtained, render it, take it all in all, the best." A part of these qualities may be correctly claimed, but we do not consider them *advantages*. A stone building is *solid*, but one of wood can be constructed quite solid enough for all useful purposes. A stone building may or may not have greater *strength* than one of wood; this depends upon the labor expended, and the quantity and quality of the materials used, in erecting it. But supposing it has, — is not a well-built wooden one strong enough?

As to "beauty," we should prefer an ordinary house of wood well painted, to one built, as suggested, of common pasture stone. Most of the stone ordinarily used in the country to build cellar and pasture walls is too large, heavy, and misshapen, and too difficult to hammer, to build the outside walls of farm buildings. There are some *beautiful* stone structures in the country, but they are expensive. In erecting farm buildings of that material, it would not answer to pay much regard to ornament. The "beauty" part, especially if carried to that extent which an improved taste is reaching, must be of wood, to meet the condition of ordinary republican purses.

As to the imperviousness of a stone building to moisture, much also depends upon the kind or quality of the stone and mortar used, and the care and skill expended in erecting it. Where there is a deficiency in either, it is difficult afterwards to apply a thorough remedy. Perviousness to moisture is not a rare complaint with regard to stone. Downing says, the fault of dampness, which is generally found of stone buildings, can be remedied by what is technically called furring off. This undoubtedly, to a partial extent, avoids the difficulty, but does not wholly eradicate it. There is an atmosphere like that of a vault or cellar, in the rooms of stone buildings, in the winter, which have not been heated for some days. Many of our stone churches, which are not heated but once a week in that season, are wholly unfit for an invalid to attend.

"Bad mortar," says Waistell, a celebrated English writer, "is the main cause of the decay of *all our modern buildings*, from the cottage to the palace." And in connection with this subject he remarks, that "Roman cement should be used in the foundation, in exterior jointing, and frequently even plastering in the interior in different proportions, according to circumstances." This material is seldom here used for such purposes, if for no other reason than for the additional expense. We do not think that the mortar ordinarily used here is superior to that used elsewhere, while the frost, being more severe, acts more freely, and produces a greater injury.

Stone is certainly more durable than wood, but the latter is more readily repaired. Whether the walls of a house be of one or the other, the building is of use so long as the doors, windows, and the interior materials and work admit of its being kept in habitable order. The *old* stone walls would be of little value of themselves alone. If proper attention is paid to repairs, the wooden house will fully realize the wishes of the writer referred to, when once well built; "there it stands, to be transmitted to children, and children's children, unto the third and fourth generation," and longer if desirable.

It is generally thought, perhaps, that stone is warmer in winter and cooler in summer than wood. We have never been convinced of the truth of this opinion by any reasoning of others, or by our own experience. Stone is a better conductor of heat than wood. In winter, the rooms of a wooden building are more readily heated, and will better retain the warmth. Walls of stone when cold, being thick, are not then much affected by the sun's rays. In summer, the sun heats them to a high degree, and from their thickness, they retain greater heat than will ordinarily pass off in the night. A neighbor of ours, a great stickler for the advantages of stone, says he has observed that the rooms of a stone house continue cooler later into the warm weather, and continue warmer later into autumn, than those of wood. Why is this so, except for the reason that the walls of stone cooled by the cold of winter, are less readily heated, and being thoroughly heated, are less readily cooled?

It is often said that the buildings in our country make an unfavorable impression upon foreigners, because they are built of wood. They have the appearance of being mere temporary tenements, boxes, hastily built, and to be removed at a convenient opportunity. Let us not place too much value upon such opinions, nor attempt to please the taste of strangers accustomed to see structures of other materials, (mud and turf, as well as stone,) unless for substantial reasons. For our part, we prefer the cheerful buildings of our own happy villages, to the heavy, *solid*, gloomy, and sombre structures of stone.

But the main objection to stone is its greater expense. Farmers who have more capital than is sufficient to build of wood, and do not mind making an outlay, if not a sacrifice, can try the experiment of erecting stone ones; but we should advise them to expend their extra funds in improvements upon the land. L. C. E.

PROVIDENCE, *April* 27, 1850.

For the New England Farmer.

NATURE AND OFFICES OF EARTHS AND SOILS.

I. EARTHS AND SOILS being the laboratory wherein the food or nutriment of the plant is prepared, and the media through which it is conveyed to the root, it becomes a matter of primary importance to the gardener and agriculturist to obtain correct ideas of their component parts, and of the offices they perform in the work of vegetation. It will also be very useful to acquire a method of *general classification*, so as to arrive at some degree of precision and systematic arrangement. On this subject, says the Encyclopædia of Gardening, at No. 1031. 1.: "A correct classification of soils may be founded on the presence or absence of organic or inorganic matter in their basis. This will form two grand classes, viz., *primitive soils*, or those composed entirely of inorganic matter; and *secondary soils*, or those composed of organic and inorganic matter in mixtures. These classes may be subdivided into *orders*, founded on the presence or absence of saline, metallic, and carbonic matter. The *orders* may be subdivided into *genera*, founded on the prevailing earths, salts, metals, or carbon; the *genera* into *species*, founded on their different mixtures; the *species* into *varieties*, founded on color and texture, and *subvarieties*, founded on moisture, dryness, richness, lightness, etc."

In naming the genera, the first thing is to discover the prevailing earth or earths; thus, "Sir Humphry Davy has observed, the term *sandy soils* should never be applied to any soil that does not contain, at least, seven eighths of sand; sandy soils, that effervesce with acids, should be distinguished by the name of calcareous (chalky) sandy soils, to distinguish them from those that are silicious, (of the nature of flint.) The term *clayey soils* should not be applied to any land which contains less than one sixth of impalpable earthy matter, not considerably effervescing with acids." The word *loam* should be limited to soils containing at least one third of impalpable earthy matter, copiously effervescing with acids. In general, the soils, the materials of which are the most various, are those called *alluvial*, or which have been formed from the depositions of rivers; and these deposits may be designated as silicious, calcareous, or argillaceous, (clayey;) and in some cases, the term *saline* may be added as a specific distinction, applicable, for example, at the mouths of rivers, where their alluvial remains are overflowed by the sea.

II. THE QUALITIES AND VALUE OF SOILS are discoverable botanically, and by chemical analysis. First, botanically, that is, by the plants which grow on them naturally. The sainfoin (*hedysarum onobryitris*) is almost always an indication of a calcareous soil; the common colt's-foot, (*tussilago-farfara,*) of blue clay; purple sandwort, (*arenaria rubra,*) of poor sand; the common wood sorrel, (*oxalis acetosella,*) of the presence of iron. Secondly, by chemical analysis. The quantity of soil best adapted to a perfect analysis is stated to be four hundred grains; it should be collected in dry weather, and exposed to the air till it becomes dry to the touch. The process of analysis is complicated, and one of extreme nicety. Some cultivators may be qualified to perform the necessary operations, but in general a degree of accuracy is required which can only be obtained by constant practice, founded upon scientific principles. The following is the analysis of a fertile soil in the neighborhood of Bristol, R. I.: in four hundred grains, there were of water, .52; silicious sand, 240; vegetable fibre, .05; vegetable extract, .03; alumina, .48; magnesia, .02; oxide of iron, .14; calcareous earth, .30; loss, .06. On the utility of analysis, Dr. Ure (Dict. of Chem.) observes, that "no system can be devised for the improvement of lands, independently of experiment; but there are few cases in which the labor of analytic trials will not be amply repaid by the certainty with which they denote the best methods of melioration, and this will particularly happen when the defect of composition is found in the proportions of the primitive earths. In supplying organic matter, a temporary food only is provided for plants, which is in all cases exhausted by means of a certain number of crops; but when a soil is rendered of the best possible constitution and texture with regard to its earthy parts, its fertility may be considered as permanently established. It becomes capable of attracting a very large portion of vegetable nourishment from the atmosphere, and of producing its crops with comparatively little labor and expense."

III. OF THE USES OF EARTHS. *Pure earths*, exclusively of organized matter and water, are allowed, by most physiologists, to be of no other use to plants than that of supporting them, or furnishing a medium by which they may fix themselves in a situation favorable to their future growth. But earths and organic matter, that is, *soils*, afford at once support and food. Thus the *pure earths* may be considered as the mechanical agent in the soil. They consist chiefly of metallic bases united to oxygen, not readily decomposable; and consequently they cannot be reasonably supposed to be convertible into the elements of organized matter, which, as has been stated, are chiefly found to be oxygen, hydrogen, carbon, and azote. Plants, it is true, consume a small portion of the earths they grow in, as is discoverable by burning, for their ashes are found to contain earths; but the quantity has been ascertained

never to equal more than a fiftieth part of the weight of the plant consumed. The earthy parts of the soil are chiefly useful in detaining water, so as to supply the proper proportions to the roots of the vegetables; and they are likewise efficacious in producing the proper distribution of the animal or vegetable matter. The earths, when duly mixed with such matter, prevent it from decomposing too rapidly, and regulate the supply of its soluble parts in proper proportions to the roots of the plants. The earths are also necessary to the existence of plants, both as affording them nourishment, and enabling them to fix themselves in such a manner as to obey those laws by which their radicles are kept below the surface, and their leaves exposed to a free atmosphere.

IV. The due Tenacity and Coherence of the Soil arise from the finely-divided matters of its constituent parts, and they possess the power of giving those qualities in the highest degree when they contain much alumina (pure clay.) A small quantity of finely-divided matter is sufficient to fit a soil for the production of turnips and barley; and a tolerable crop of turnips has been produced on a soil containing eleven parts out of twelve sand; a much greater proportion of sand, however, always produces absolute sterility. Tenacity is obtained by certain proportions of finely-divided vegetable and animal decomposable matters in union with alumina.

V. Friability, or Looseness of Texture, is chiefly occasioned by the admixture of sand; and in a certain degree this quality is of importance, in order that the operations of culture may be readily conducted, that moisture may have free access to the fibres of the root, that heat may readily be conveyed to them, and evaporation may proceed without obstruction. As alumina possesses all the properties of adhesiveness in an eminent degree, and silex those of friability, it is obvious that a mixture of those two earths, in suitable proportions, would furnish every thing wanted to form the most perfect soil, as to water, and the operations of cultivation. In a soil so compounded, water will be presented to the roots by capillary attraction; it will be suspended in it, as in a sponge, in a state of minute division, so that every part may be said to be moist, but not wet.

VI. The Power of Soils to absorb Water from the Air is much connected with fertility: when this power is great, the plant is supplied with moisture in dry seasons; and the effect of evaporation in the day is counteracted by the absorption of vapor from the atmosphere by the interior parts of the soils during the day, and by both the exterior and interior during the night. The soils that are most efficient in the supplying the plant with water by absorption from the atmosphere are those in which there is a due admixture of sand, finely divided clay, and carbonate of lime or chalk, which mixture constitutes a loam, with some animal and vegetable matter; and which are so light as to be freely penetrated by the atmosphere. *The productiveness of soils* is influenced by the nature of the subsoil on which they rest. When they are immediately situated upon a bed of rock, they are rendered dry by evaporation much sooner than when the subsoil is of clay or marl. A clayey subsoil will sometimes be of material advantage to a sandy soil, and will retain moisture so as to be capable of supplying that lost by the earth above. A sandy or gravelly subsoil often corrects the imperfection of a too great degree of absorbent power in the true soil. In calcareous countries, where the surface is a species of marl, the soil is often found only a few inches above the limestone, and its fertility is nevertheless unimpaired; though on a less absorbent soil this situation would occasion barrenness; and the sandstone and limestone hills may be easily distinguished at a distance in summer, by the different tints of vegetation. The grass on the sandstone hills usually appears brown and burnt up; that on the limestone hills, flourishing and green. In the Island of Cuba, and others, where the subsoil is chalk to a considerable depth, the verdure of grass, and of young trees and shrubs, is often retained during parching seasons, while in many other situations the grass is entirely scorched, and the trees lose their leaves, owing to the continuance of dry weather. Chalk absorbs moisture readily, and retains it tenaciously; hence, in hot, dry summers it gradually affords moisture to the roots of plants at a time when more open and porous soils are comparatively deprived of moisture.

VII. Chemical Agency of Soils. Besides the mechanical uses of soil, there is another agency between soils and organizable matters, which may be regarded as chemical. The earths, and even the earthy carbonates, have a certain degree of chemical attraction for many of the principles of vegetable matter; when boiled with pipe-clay or chalk, they form a combination by which the vegetable matter is rendered more difficult of decomposition and solution. Pure silica and silicious sands have little action of this kind; and the soils which contain the most alumina and carbonate of lime, are those which act with the greatest chemical energy in preserving manure. Such soils merit the appellation, which is commonly given to them, of *rich* soils; for the vegetable nourishment is long preserved in them, unless taken up by the organs of plants. Silicious sands, on the contrary, deserve the term *hungry*, which is commonly applied to them; for the vegetable and animal matters which they contain, not being attracted by the earthy constituent parts of the soil, are more liable to be decomposed by the action of the atmosphere, or carried off from them by water. In most of the black and brown rich vegetable moulds, the earths seem to be in combination with a peculiar extractive matter, afforded during the decomposition of vegetables; this is slowly taken up and attracted from the earths by water, and appears to constitute a prime cause of the fertility of soil.

VIII. Soils may be improved by Pulverization, or the minute divisions of the particles by mechanical labor; and under this term are included the operations of ploughing, harrowing, digging, trenching, hoeing, and raking. It is of the most essential service to land, and induces fertility in a variety of ways. It opens the ground, and thus promotes the regular diffusion of water. It tends to increase the quantity of vegetable food, by enabling the water holding nutritive matters in solution, to convey it more equally to the roots of plants. Pulverization, by opening the soil, promotes and assists the free ingress of heated air, and thus regulates and improves the temperature of the soil; it also introduces, and as it were buries, a portion of the atmospheric air, and thus furnishes another source of electro-chemical decomposition and combinations.

The depth of pulverization must depend upon the nature of the soil and subsoil. In rich, clayey ground it can scarcely be too deep; and even in sand, unless the subsoil contains principles noxious to vegetables, deep comminution should be practised. When the roots are deep, they are less liable to be injured either by excess of rain or drought; the radicles are shot forth into every part of the soil, and the space from which the nourishment is derived is more considerable than when the seed is superficially inserted in the soil.

IX. Soils may be improved by adding to, or subtracting from, them ingredients in which they are deficient, or superabound. If a soil, of good appearance and texture, contain sulphate of iron, it may be ameliorated by quicklime; if there be excess of calcareous matter, it may be improved by the application of sand or clay. Soils too abundant in

sand are benefited by the use of clay, marl, or vegetable matter.

By *burning soils*, considerable chemical change can be brought about. The bases of all common soils are mixtures of the primitive earths and oxide of iron, and these earths have a certain degree of attraction for each other. When clay or tenacious soils are burnt, they are brought nearer to a state analogous to that of sand. In the manufacture of bricks, the general principle is well illustrated: if a piece of dried brick earth be applied to the tongue, it will adhere to it very strongly, in consequence of its power to absorb water; but after it has been burnt, there will scarcely be any sensible adhesion.

The soils improved by burning are all such as contain too much dead vegetable fibre; also, all such as contain their earthy constituents in an impalpable state of division, that is, stiff clays and marls; but in coarse sands and rich soils, containing a just mixture of the earths, and in all cases in which the texture is sufficiently loose, or the organizable matter sufficiently soluble, the process of burning cannot be useful.

X. Trees improve bad Soils. It certainly is not one of the least recommendations of planting, that it may be made to contribute essentially to the improvement of a bad soil, as is the case on sterile heath and commons, where three means, the consequences of the planting, act together in promoting such improvement. The first is, the shade of the trees, which, by decomposing the vegetable matter on the surface soil, renders it at once more fertile, and easily penetrable by the root. The second is, that by the decomposition of the annual fall of leaves, an addition is made to the vegetable soil, and that of the very best description. The third circumstance is, that as the roots collect a great deal of their support from a depth much lower than field vegetables are used to reach, they hence convert the *useless* into *useful*. In short, instances are not wanting, where land previously producing little besides heath, has, after producing a crop of trees, proved, without further means, very tolerable pasture.

BERNARD REYNOSO.

For the New England Farmer.

CULTIVATION OF INDIAN CORN.

Mr. Editor: In reading F. Holbrook's article on this subject, I was much pleased with his manner of cultivation, in some respects, particularly the preparation of the soil, and the method of saving seed-corn. Deep planting, too, in case of frost, is an advantage, as the corn is much more likely to start again if killed down to the ground. But in advocating wide planting, I beg leave to differ from him. He says he is "suspicious of the reasoning which favors close planting as a protection against drought." Now, if, as he seems to imply, in planting double the number of hills, we raise double the number of stalks on an acre, his reasoning might be in some measure correct; but I think that if, instead of doubling the number of stalks, we leave a less number in a hill, so as to have three as often as we should have two at the usual distance, the extra draught upon the moisture of the soil will be fully counterbalanced by the increase of shade! I think, too, that Mr. H. furnishes us with evidence in favor of close planting, in the fact that the corn planted in drills yielded from ten to fifteen bushels more than that planted in hills.

Another point, in which I should differ from Mr. H., is in the application of manure wholly by spreading; although I do not advocate the opposite course, of applying it all in the hill.

I think the land should be made rich by spreading manure on the surface, and ploughing it in, and then a small quantity of well-rotted manure should be applied in each hill. In a climate as cold as the central and northern parts of New England, something is required to warm the ground, and keep the young plants thrifty during the cold weather which sometimes succeeds the time of planting in the spring. This the manure in the hill supplies, while that which is spread carries it through, and causes it to ear better; thus obviating objections, to which either mode, alone, would be liable.

I have now given you my opinion, in part, as to the best method of planting, and applying manure, and I will give you a few facts to show how it works in practice. Previous to 1838 we applied our manure mostly in the hill, and planted our corn at the distance of three and one half feet each way; planting as much ground as we could manure in this manner, and hoeing it twice or three times, as we could spare time before haying; after which, it was generally left until time to harvest. I do not recollect particularly about the crops obtained, as I was young at that time, but I am told that eighty bushels of ears were considered a large crop, and fifty or sixty a fair average. But the summers of 1836 and 1837 were so cold, that in this way we got no corn at all; and in 1838 we planted less than half our usual quantity of land, and applied as much manure as we had previously allowed for the whole. In addition to this, instead of having the hills three and one half feet in the rows, we planted them about two; and we were careful to hoe thoroughly three times before haying, and, immediately after haying, all the weeds which had escaped were pulled up and thrown into the hog-yard. The result was, that instead of sixty bushels to the acre, we obtained one hundred and sixty. Since that time, we have pursued a similar course with like success.

We generally spread about twenty-five loads of manure to the acre every other year, and put from eighteen to twenty in the hill every year. (These loads contain only twenty-five bushels to the load, which, taking the average, would be considerably less than Mr. H. applied.) By keeping the ground wholly clear of weeds in the manner I have described, which makes the least work in the "long run," we have obtained from one hundred and forty to one hundred and sixty bushels ears to the acre, and the land was constantly improving.

On one piece, containing one hundred and twenty-eight rods, after managing it in this way for two or three years, we raised a fraction short of sixty bushels of clean, heavy oats; and there were four apple-trees under which but little grew, so that there was, in fact, no more than three fourths of an acre; besides which, eight hens lived on them for some time before they were harvested. This would make the oats yield at the rate of eighty bushels to the acre. While speaking of this piece, there was another fact, which goes to confirm what you have remarked in a former volume. When we seeded it with grass, we sowed herdsgrass and clover, mixing them together, and sowing the whole of the piece alike; but a part on which we had raised corn produced clover, with scarcely any herdsgrass, and a part on which we had raised potatoes produced herdsgrass, with as little clover.

W. F. B.

Ashfield, Mass., *April* 19.

Remarks. — As to the distance of planting corn, much depends on the size. The Canada corn, and the small cap corn, will bear near planting; and without close planting, a full crop cannot be obtained. These kinds require twice as many plants on an acre as would be proper for the large varieties. — Ed.

DORKING FOWLS.

For the New England Farmer.

Mr. Cole: This breed of fowls derives its name from a town in England, where, some fifty years since, it was introduced from China. These fowls were selected by a person, a native of Dorking, Surrey, who resided in the East Indies, and held a civil office under the Honorable East India Company.

The fowls were brought to England in one of the company's ships, and were carried to Dorking, where they were highly prized by the recipients, as great curiosities, on account of the fifth toe, the snow-white plumage, and the soft and downy feathers with which they were covered.

These fowls were for many years bred with the utmost care, by the family of the person who selected them, and were kept by them exclusively, the family regarding it a matter of some honor to be the sole possessors of this race; and only within a few years, the thorough-bred fowl has been allowed to go out of their possession.

That the Chinese possess a race of fowls which have the fifth toe, is proved by the fact, that a gentleman of this city has received direct from Canton, China, a pair of fowls, which have the fifth toe developed as fully and distinctly, and in the same form, as the best bred Dorking. These fowls, which arrived within the last six weeks, are also covered with a snow-white plumage.

I have been thus particular in giving the history of the Dorking fowls, from the fact, that Dr. J. C. Bennett, in the Poultry Book, on page 200, says, "For instance, the Dorking fowl was originally produced *by crossing the Great Malay with the English Game fowl*, as an accident; but it by no means follows that Dorkings are the uniform, or even the common result of such a cross, for hundreds of such experiments have proved unsuccessful. In order, then, to produce pure Dorkings, the breeding must continue from the original stock, carefully avoiding 'close,' and 'in and in' breeding."

Pure Dorkings from the Great Malay and the English Game!

The plumage of the pure bred Dorkings is white, with legs and bill of the same color. The fifth toe is also an indispensable characteristic. The combs are both single and double. The wattles are of medium size. The hens are good layers, constant sitters, and most excellent nurses. The flesh of these fowls has an agreeable flavor, and is rich and juicy. The average weight of these fowls is from twelve to fourteen pounds per pair. The eggs are large, rich, and nutritious. The chicks are hardy, and easily raised.

The engraving was made from a drawing of a pair of Dorkings which were two years old at the time it was taken.

No thorough-bred Dorking ever has legs or bill of any other color than white. Dorking fowls which show any other color, are of impure blood, and cannot be depended upon to produce their like.

All *speckled*, *fawn-colored*, or *black* Dorkings are mongrels, and any person having the thorough-bred white Dorkings, can produce, by crossing with other breeds, mongrel specimens of such color as they may desire.

On page 74, Dr. Bennett has *favored* the reader with an elaborate description of the Black Dorking, given by Mr. N. C. Day, of Lunenburg, Mass., who says, "they came from Philadelphia." "Their bodies are of a large size, * * and of a jet black color." * * "The neck feathers of some of the cocks are *tinged* with a bright gold color, and those of some of the

hens bear a *silvery* complexion." (*Jet black, bright gold color,* and *silvery complexion!*) "Their tails are shorter and broader than others of the race," (what race?) "and they feather rather slowly."

I, for one, cannot suffer such gross misrepresentations to pass unnoticed. Dr. Bennett has no apology for suffering Mr. Day's statement to appear in his work. Dr. Bennett, if he had but a slight acquaintance with the different breeds of domestic fowls, would have seen at once, that the Black Dorkings described by Mr. Day were a mongrel race, into whose composition the blood of the Black Java largely entered. Yours, &c.,

S. BRADFORD MORSE, Jr.

For the New England Farmer

WHITE SHANGHAE FOWLS.

Mr. Cole: In the account of the White Shanghaes written by me, and published in the last number of your paper, an error occurs as to the year in which the importation of the Shanghae fowls by Capt. A. S. Palmer, of Westerly, R. I., was made. The gentleman from whom the information was received, has had an interview with Capt. Palmer, and in a letter bearing date May 9, 1850, says, "In one of my communications to you, I gave it as my opinion, that the fowls of Dixon were not Shanghaes — not having been imported from that place, but probably from Canton. That information, though derived from two sources, was incorrect. Capt. Palmer informs me that he brought them from Shanghae, in the year 1845, via Canton. He put up two large coops of them, but succeeded in bringing home only eight pairs, most of the largest having died on the passage. He says that they ate fowls on the passage that weighed eleven pounds, dressed; and that some of his fowls died on the passage, in consequence of becoming too fat. When he arrived in Canton, the fowls were nearly as great a curiosity to the people of that place as they were here. He also informed me that his was the second vessel that ever entered the port of Shanghae.

"Capt. Palmer's brother has just brought from Shanghae several pairs for the captain, of two or three sizes; one pair he speaks of as being uncommonly large. I endeavored to purchase a pair of the captain, but he says that fifty dollars would not purchase a pair." Yours, &c.,

S. BRADFORD MORSE, Jr.

For the New England Farmer.

CONGENIALITY OF STOCKS AND SCIONS.

Mr. Cole: This subject seems to be very imperfectly understood, probably from the fact that those most engaged in horticulture have but little time or desire to try experiments. Enough has been done, however, by amateurs and others, to show that scions set in unnatural stocks will frequently grow, and that some such scions are productive of fruit, even better than on their own bottoms. The drawback, however, is, that they will not live so long. But the pear on the quince, which some years past was thought to be but of short duration, is now known to live twenty-five years. This union seems to be the most successful of unnatural unions. There was a paragraph in the first volume N. E. Farmer, p. 40, which had traversed the rounds of the horticultural papers, stating that a gentleman visiting England had tasted of an apple grown on a *pear* stock, and that "it had a peculiar flavor, somewhat like a pear." See, also, the same on p. 79. It seems from these paragraphs, that the apple can be successfully ingrafted into the pear. It is not understood, however, that the *reverse* is so successful, if we except the Seckel pear, which is said to do quite well so far as tested. Now, in this union, can it make any difference whether the pear is the scion or the stock? If the Seckel pear does well or better on the apple, may there not be some other varieties which will do as well? There seem to be different natures in pears, (as some will, and others will not, grow well on the quince;) and may we not reasonably infer that there are many other pears which, by proper testing, will yet be found congenial with the apple? Having last year quite a number of suitable apple stocks, I inserted some of the scions of the Beurre Diel, Louise bon de Jersey, and one of the Beurre d'Aremberg. The two former kinds did well as respects growth; the latter put forth only a couple of leaves, and died the last winter. The Diels and the Jerseys are grafted a foot from the ground, and I shall let them take their course, and at some future day may report their fate. This year I have inserted a variety snug to the ground, with a view of their *re-rooting*. I have two other pears inserted on *forest* stocks, (different from any which I have heard experimented upon,) and anxiously wait the issue. I intend to make still further experiments, for my own gratification.

I have heard of pear scions bearing well on apple-trees in a bearing state, and think that inserted in small stocks they may *begin* to bear a little; but whether they will so continue, in either case, is doubtful. Nevertheless, it seems to me, that if the apple will do well on the pear, the pear will do equally well on the apple. L.

Boston, *April* 22, 1850.

For the New England Farmer.

"CORN FOR FODDER."

Mr. Cole: Having seen several inquiries, in the New England Farmer, with regard to raising corn fodder, and having been in the habit of raising it for a number of years, I will give you a statement of my method of raising and curing. I think that sweet corn is preferable to any other. I sow it in drills, about three feet apart. I furrow deep, and fill the furrow with compost, and drop the corn the whole width of the manure, and from two to three inches apart. I always cut it up before the frost. I stook it up immediately after cutting, in bunches so large that I think the wind will not blow them over. I place my arms round near the top, and bring them in as tight as I can, then break the tops over as you would a shock of stalks. I let them stand out till they are sufficiently dry to pack away in the barn. I have never had any trouble in curing fodder in this way. W. S.

Medfield, *May* 8, 1850.

CULTIVATING DWARF PEARS.

Every intelligent fruit raiser is aware of the necessity of cultivating and manuring the soil well for dwarf pear-trees. S. B. Parsons states that he has seventeen hundred trees on four acres; that he applied to this orchard, last spring, $150 worth of manure, and gathered in the autumn two hundred and seventy-five bushels of potatoes, thirty tons of sugar beets, and a large quantity of turnips and cabbages — paying the expenses of manure and cultivation, and giving the pear-trees a vigorous impulse. — *Maine Farmer.*

Domestic Department.

THE EDUCATION OF FARMERS' DAUGHTERS. — Most of the farmers of our country are the sons of farmers; and most of their wives are the daughters of farmers. This shows the propriety of educating our children with reference to our own occupation. The first and most important step towards the improvement of the great agricultural community, is the improvement of the mind, by a proper early education. Until they, as a class, are as well informed as those engaged in other pursuits, they must and will feel a degree of diffidence, a want of confidence in themselves. The most important duty we have to perform, either as parents or citizens, is that of properly educating and bringing up our children. Until the farmers so discharge that duty, as that their descendants rank equal with those engaged in other pursuits, they will be guilty, as they too long have been, of a great dereliction of duty.

I am well pleased to see, of late, able articles in our journals, on the subject of giving our sons an agricultural education; but this should be coupled with a good common education, at least. I am proving the want of this, in almost every sentence I write.

We should also remember, that the education of our daughters is of equal importance, and that common justice requires that we give them an equal chance with our sons. It is true, our women do not vote at our elections, or hold political offices, or manage the out-door concerns of the farm; but it is equally true, that they exercise their full share of influence in all our concerns. They have the moulding, direction, and training the minds of our children — the boys to the age of ten or twelve, and the girls to a much greater age; and nature has admirably fitted them for the performance of this important duty. Their early impressions, derived from the mother, are indelibly fixed in their minds, and have great weight in forming their future characters. Most of us, who had a mother living after we became old enough to recollect, can well remember the fine sympathetic feelings she possessed, and taught us; and these are among the noblest feelings of the human heart. We can also well recollect the rigid principles of morality taught us by her, and the lasting impression they made on our minds. If we look about among our acquaintance, we shall see that wherever there is a well-educated, intelligent mother, there is also an intelligent family of children. And this is a much more important matter, than the rearing of fine, high-blooded animals with four legs.

If we will divest ourselves of pride and prejudice, and examine coolly, we shall see that our women have greater influence over us, than we are generally willing to admit.

Nor is the importance of educating our daughters less in a pecuniary, than in a moral and intellectual point of view. Much of the success, prosperity, and comfort of every farmer, depends upon the management of his in-door concerns, by his wife. There is no occupation in which intelligent women are more useful than that of farming. If we will look about among our acquaintance, we shall see that wherever there is a wife of the right stamp, if the husband possesses ordinary ability and industry, they will be prosperous. If I am right in this, it shows the necessity of properly educating our daughters, *and giving them a proper training in all matters that relate to good housewifery*. Let us fit them to make good farmers' wives, and they will answer for those engaged in other pursuits. We should first attend to the useful and substantial part — *that well done*, if we can afford it, to do something by way of the ornamental. But it is feared that some of our farmers pay too little attention to the former, and too much to the latter.

A young lady, with ever so fashionable an education, *if she possessed no knowledge of the kitchen, and the different departments of housekeeping*, however well she might show off in the parlor or drawing-room, would make a farmer a very unsuitable companion; she would not be worth as much as Lot's wife after she became salified, because he could procure from her salt for his porridge.

The first and most important step is, to make our common schools good. If this is neglected, the great middling class of farmers, and almost all the poorer class of people, will fail in giving their children a proper education. We should make our common schools such that our scholars can go from them direct to the academy, to good advantage, or procure a good common education without. When this is done, we shall have an intelligent agricultural community.

A FARMER.

— *Chickopee Telegraph.*

TO CLEAN KNIVES. — Charcoal, ground to powder, is one of the best things ever discovered for this purpose.

Youth's Department.

GOOD SOCIETY. — It should be the aim of young men to go into good society. We do not mean the rich, the proud, and fashionable, but the society of the wise, the intelligent, and the good. Where you find men that know more than you do, and from whose conversation one can gain information, it is always safe to be found. It has broke down many a man by associating with the low and vulgar — where the ribald song was inculcated, and the indecent story, to excite laughter, and influence the bad passions. Lord Clarendon has attributed his success and happiness in life to associating with persons more learned and virtuous than himself. If you wish to be respected, if you desire happiness and not misery, we advise you to associate with the intelligent and good. Strive for mental excellence, and strict integrity, and you never will be found in the sinks of pollution, and on the benches of retailers and gamblers. Once habituate yourself to a virtuous course — once secure a love of good society — and no punishment would be greater than by accident to be obliged, for a half a day, to associate with the low and vulgar.

Health Department.

INDIVIDUAL ODOR. — BATHING. — The quantity of heat, perspiration, or moisture continually passing from the body is very great. Frequent exposure of the naked body to the air, changes of clothing, and bathing, are necessary to health. No person can be considered cleanly without their observance.

"It may shock the feelings of a young lady," says Mrs. Farrar, in her Young Lady's Friend, "to be told that this large quantity of matter which is constantly passing off through the skin, has an individual odor, more or less disagreeable in different persons. Now, each person is so accustomed to his own atmosphere, that he is no judge of his odor; but, since most persons can recollect some of their friends

who affect them disagreeably this way, all should bear in mind the possibility of so offending others; and, though none of us can change the nature of the atmosphere, which we are always creating around us, we can prevent its becoming a nuisance by the accumulation of excreted matter on the skin or in the clothing; we can, by washing every part of the skin once in twenty-four hours, be sure of sending off only fresh exhalations."

Mechanics' Department, Arts, &c.

The Ohio Indestructible Mineral Paint. — A paragraph in the last number of the Farmer and Mechanic, asking for information in regard to this valuable article, induces me to state the result of my own experiments with it. I have used it on *tin, wood, iron, canvas, and brick*, and find it exceedingly well adapted to either. For *tin roofing* it works exceedingly well, becoming in twenty-four hours sufficiently *set* to resist storms, and continues to indurate for several months, until it becomes a perfect stone coating, apparently sufficient, when three good coats are applied, to endure for half a century. Applied to wood covering, whether on the roof or sides of buildings, it is equally valuable. It *sets* as soon as ordinary lead paint, and, as when used on tin, continues to harden gradually, until it becomes perfectly indurated, or like slate. In this state, a quantity of glowing anthracite coal, or a small charcoal fire kindled on the surface of the wood thus painted, has no effect other than to char the wood underneath, decomposing or removing the paint. Any thing like cinders or burning materials, driven through the air and falling on wood thus covered with the paint, would fail to ignite the wood at all. For canvas or burlap roofs, or other covering, it requires three coats, and forms a perfect protection from the elements, and is apparently as durable as metal. For iron, it seems to adhere with great tenacity, and forms a perfect incorrosive surface, protecting it from all the effects of exposure to the atmosphere. For *brick* or *stucco* work, this paint seems to be invaluable, as two or three coats of it on the surface completely preclude moisture, and obviate the great evil attendant on brick dwellings, arising from the absorption and retention of moisture from the outside. In short, I have tested its qualities in a most thorough manner, and have full confidence in the extraordinary properties claimed for it by the proprietor. The article thus tested was of various colors, and furnished by Mr. W. H. Starr, 67 Beekman Street, who is general agent for the same, and has issued a pamphlet with full description, directions, &c., in regard to this paint. H. S.
— *Farmer and Mechanic.*

Blue Writing Ink. — Four ounces sulphate of iron, two and a half drachms of sulphuric acid, one ounce, or q. s. nitric acid, six ounces ferrocyanide of potassium; water q. s. Dissolve the sulphate of iron in one pint of water, then add the sulphuric acid, and heat the solution to boiling; then pour in the nitric acid, in small quantities at a time, continuing the boiling until the iron is peroxidized. Dissolve the ferrocyanide of potassium in two pints of water, and add the former solution, when cold, to this. Collect the precipitate that will be formed on a filter, and carefully wash it with distilled water, until the blue precipitate begins to dissolve in the water. It will now be found to be soluble in pure water, although insoluble if any other salt be present. Rub what remains, in a mortar with distilled water, until a clear solution is obtained, of the required intensity of color. A little oxalic acid is sometimes added, but this is not necessary, if the above instructions be carefully followed, as the precipitate will be perfectly and permanently soluble in pure water. — *Scientific American.*

SUBSOIL PLOUGHING.

The value of subsoil ploughing seems not to be generally understood in this country. In the renovation of old lands, that have been long under cultivation, there can be no reasonable doubt, that the breaking up of the under soil, which has become hard and almost impenetrable for air, roots, or moisture, and the gradually bringing up to the surface, or the intermingling with the surface, soil of substances from which former crops (if of a *culmiferous* class, such as wheat, oats, Indian corn, &c.) have extracted little or nothing of their fertilizing properties, is one of the most effectual means to bring the soil into its original productiveness, that can be adopted. This principle of culture, which has been in operation some twenty-five years in Europe, is operating in a large increase of agricultural product.

In this country we have not had sufficient experience to come at a correct comparative estimate of the system. An account of its operation, and some of the results as experienced by the writer, who has used a subsoil plough for the last five years, may not, Mr. Editor, be uninteresting to some of your readers.

This plough follows in the bottom of the furrow left by the seed or surface plough, and may be set by a gauge, or screw, for any depth desired, from eight to twenty inches. This plough has been constructed (or improved from its original construction) on principles appearing the best fitted to break up, or disintegrate, the soil at this depth, without throwing it up to the surface, as is the case with the surface plough. Some of the benefits derived, beyond the free admission of the air, are that, in seasons of drought or dry weather, the roots can strike down deep below the action of heat, and obtain moisture. So too, in seasons of wet weather, the surplus of moisture can easily pass down through the subsoil, so as to be beyond an injurious influence on vegetation. After the ground has received one thorough operation of the subsoil plough, it can be worked with much less expense, and be dry, and ready for use much earlier in the spring. I have a field of about two acres, one half of which, in the spring of 1845, was subsoiled; the other part was left without this operation. With a view to ascertain the value of subsoiling, the field was manured alike, and planted to corn, the last of May. The summer was dry, but not a hill on the subsoiled part intimated the want of moisture, while on the other part, the leaves rolled very much, and the product was less of fruit and stalk. The field was laid to grass in the fall, and I have mowed it four years, with the same comparative result as with the corn.

Perhaps I ought to have stated, that in preparing that part of the field where the subsoil plough was not used, it was ploughed with a large sod plough, to the depth of twelve or fourteen inches; and also, that we considered it the best texture of soil. I have another field, that has been under the hoe for the last nine years; six years ago, at the time of its coming into my possession, it produced about twenty or twenty-five bushels of corn per acre; the next spring (1844) it received a thorough operation of the subsoil plough. Since that time it has been cultivated for early vegetables, potatoes, peas, beans, vines,

&c., without any extra dressing of manure, and still with an increasing product from year to year. It is believed that all lands are benefited by subsoiling. I have not tried it much on light, sandy soils, but there are some of our very best farmers in the state, who have tested it on this kind of soils, that believe it to be of equal benefit on these, as on hard soils. It is hoped that many of the farmers of the county and state will try these ploughs the coming season, and note the result. Ploughs are kept at Manchester, Concord, and Nashua, the prices varying from eight to sixteen dollars; and we venture to predict that any farmer paying ten or twelve dollars for one, will never feel that his money was paid for a useless implement. B. SHATTUCK.

Bedford, 1850.

— *Granite Farmer.*

N. H. STATE AGRICULTURAL SOCIETY.

We acknowledge ourself deeply interested in the progress and welfare of this infant institution. We feel that on its successful operation, its early, rapid, and strong progress, depend great interests to our hard-soiled and rock-ribbed state. The objects of the society are to promote agricultural and mechanical interests; — to assist in the general diffusion of more enlarged and scientific views on these subjects; — to bring the practical working men of the state together from time to time, that they may compare notes and strength, acquire individual zeal by associated labor and emulation; and to rally around a home centre that interest that has in time passed looked abroad for its objects of desire and care. There is, we are aware, upon this subject a mistaken sentiment, that has in times past, and that may now, to a certain extent, prevent many from coming up with cordial and hearty effort to the aid of our new society. It is this. We hear it occasionally suggested that it may do for New York to support liberally a State Society — her soil is rich, easily tilled, and consequently such a course will pay. Massachusetts may do this to advantage, as she has more wealth to expend in agricultural investigations, greater facilities for advanced cultivation, and more inducements in the shape of a market demand. With the exception perhaps of this last advantage, are not the very reasons assigned as objections to hearty labor for, and support of, a State Society, *the very reasons* why the most earnest labor of every individual should be freely and unsparingly given for the support of such a society? Are they not the most urgent reasons why the new State Society should receive unmixed sympathy and most cordial support?

Is New Hampshire soil hard to cultivate, and does it yield its returns from force and grudgingly? Who then more than the New Hampshire farmer needs to call to his aid all the resources of science, that he may compel the more easily the unwilling earth? Who needs more than he the benefits of associated effort? For one individual to attempt for himself alone a tithe of all the chemical and observational experiments needed upon the varieties of our soils, would consume a lifetime in unrequited toil. And if, as it has been in times past, no one of these experiments should be put on record, at the end of this lifetime the farming community would be no wiser than before. Each one would be obliged to go over the same ground for himself, and that as though no other had ever tried that path before him.

Association puts the acquisition of a whole body of experimentalists into the possession of each individual; a member of an efficient association becomes gifted with the hundred eyes of the fabled Argus, with which to pry into the secrets of nature, the hundred hands of Briarius, with which to work in a hundred fields of labor. That New Hampshire soil is poor and hard, then, is the best reason why the New Hampshire farmer should strive for better modes of culture. Science has locked up in her depositories all the secrets of our hard soil, and the farmer has but to ask of her, and she will instruct him how to make the difficult easy. If our farms are the "strong man armed," science is the "stronger than the strong man armed."

That New Hampshire has not the wealth that other states may have, furnishes another reason why her farmers should combine their energies to bring wealth to their state by a better and more scientific mode of culture. What farmer is there, in our state, that could not by more care, a more intelligent labor, and a more judicious application of means to an end, secure the same crop from half the number of acres he now cultivates? In the language of the "Old Man of the Mountain," "Where's the use of mowing, tugging, and sweating over 30 to 40 acres of land to get 20 tons of scorched wiry redtop or speargrass, and this too filled with sorrel, whiteweed, and blackberry vines, when by proper culture, and as cheaply, in the long run, he can get the same quantity of well, made herdsgrass from 6 or 8 acres." If the intimation conveyed in this query of the venerable "dweller among the rocks" is true, that twenty tons of hay now grown on from thirty to forty acres, might be made to grow on from six to eight, to say nothing of improved quality, it is nothing beyond the limits of a reasonable supposition that on the same or even less amount of land the grass crop of the state might be doubled in a very short time, by a more intelligent adaptation of means and agencies. Suppose this done. The amount of hay raised in New Hampshire is put down in the last Patent Report, (not the one presented to the present Congress,) as 680,000 tons. Let this crop be doubled, and at fair average of the prices of hay throughout the state, the productive wealth of the state would be increased more than six millions of dollars. This is but one of many products of the soil that go to make up the agricultural wealth of the state. It is, then, one of the plainest dictates of common sense, that time, labor, and money, invested in the ways and means of increased knowledge of the natures of soils and crops, and the relations between them, — in increased facilities and in better constructed implements of culture, — in any thing that shall give the farmer more entire control over the natural elements, is time, labor, and money, most wisely given.

The New Hampshire State Agricultural Society affords to the farmers of the state just the field in which to labor for the increase of its wealth. This increase, too, is not only general, but individual. The state is richer because, and only because, the individuals composing it are so.

We intend recurring to this matter again, and would close by urging upon our citizens, generally, attention to the claims of this society. "Union is strength," and in the increased strength and prosperity of one interest, and especially one so vital, all are made stronger. — *Granite Farmer.*

MANAGEMENT OF SWINE.

Messrs. Editors: I give you my experience in the management of swine. In the first place, I take December pigs, let them run with the sows two months, then wean them, and enclose them in a pen, in which they are moderately fed on corn, with as much milk from the dairy, or good swill of some kind, as will keep up a thriftiness. As soon as clover is in blossom, I leave off grain feeding, and give clover three times per day until after harvest. I then turn them on to stubble. They remain there until

about the first of September, whence I remove them to a pasture adjacent to my cornfield, and keep up their condition by giving them a small quantity of green corn. When the time of fattening comes on, I have my hogs in very fine condition to take on fat. I enclose them in a pen, and feed them altogether on corn and water, and by the time the weather is cold enough, which is the latter part of November, I slaughter them at the age of about eleven and a half months. With this treatment, they weigh from two hundred and twenty-five to two hundred and fifty pounds dressed pork. In the mean time, my second litter comes on in June, which have the benefit of the stubble with the first litter; and running with the sows, and sucking, they get a very fine start. At about two months old, I wean them and enclose them in a pen, taking the same process as with the first litter, only forcing their growth more rapidly by giving good slops, and as much corn as prudent, without fattening too rapidly for their growth. I continue this process until the first of January. I then slaughter them at about the age of six and a half months. They will average one hundred and fifty pounds of dressed pork very readily. This is no fiction, but matter of fact, from personal observation.

You will now perceive that from one sow, say having two litters in one year, eight pigs in each litter, the result will be as follows: First litter, eight pigs, weighing two hundred and twenty-five to two hundred and fifty pounds each, aggregate eighteen hundred to two thousand pounds; second litter, eight pigs, average one hundred and fifty pounds, aggregate twelve hundred pounds; which would make from three thousand to three thousand two hundred pounds of dressed pork from one breeder. This has been my treatment of hogs for the last few years, and I am satisfied it is the most profitable way I have ever tried. Brother farmers, this is an experiment on the Bedford hog, which has the qualities of enormous size, and great tendency to fatten at any age. Yours, &c.,

EDMUND J. ROSENBERGER.

Smith's Creek Farm, Va., *Jan.* 1850.

— *Genesee Farmer.*

FREE MARTINS.

When a cow produces twins, one of which is a male and the other a female, breeders have applied to the latter the appellation of "Free Martin." Among many the presumption is, that such are always barren; but it would appear from a note published some years since in the Albany Cultivator, from the pen of I. Cope, of Chester county, Pa., that such is not the case. Mr. C. says,—

"Having spoken last year to some of my friends, of instances to which it was likely that heifers were likely to breed, both of which were twins to males, I can now state that they both produced calves this spring. As it is supposed by most that this circumstance can only happen when the heifer is the larger of the twins, I have made some inquiries on this point. In the first case, the female was decidedly the larger of the two; in the latter case, from what I could learn, I think that there could be little doubt that there was the same condition existing between the two, although the difference in size may not have been as marked as in the first instance."

It is seldom that free martins are seen. Twins, or two at a birth, are common; yet in a vast majority of cases the sex is the same in both.

Bensalem, May 4, 1850. B.

— *Germantown Telegraph.*

Keep notes of remarkable events on your farm.

SUGAR CANE IN FLORIDA.

Captain Sadler, of this vicinity, has produced, considering the circumstances under which it was grown, the most extraordinary crop of sugar on record; and as the facts in regard to it, if generally known, may be extensively beneficial to the country at large, we shall proceed to enumerate them as we collected them from him.

He has produced twenty-five hogsheads of sugar, averaging one thousand pounds, from one hundred and ninety-five acres of cane, and has lost at least fifty hogsheads by imperfect grinding — having wrought nearly his entire crop by two broken rollers, which would not admit of sufficient pressure to extract the juice by twenty per cent. Another source of loss occurred in cutting down, from apprehension of frost, about sixty acres of his best cane two months previous to grinding it. The juice stood at the remarkable altitude of 12° of Beaume's saccharometer, and the sugar is, consequently, of very superior quality. The yield of molasses is about fifteen thousand gallons.

The circumstances which render this crop extraordinary in this sugar climate, are, that it grew on some of our ordinary high sandy hammock land, which had been under a continuous cultivation of corn and cotton crops for a period of perhaps fifty years, and was literally worn out as regards these two objects of culture — being incapable of producing five bushels of corn or fifty pounds of seed cotton per acre; and what renders this crop still more remarkable, is the fact, that a large portion of this land has been five years consecutively in cane, without any diminution in the annual produce under so severe a trial of its powers, and without the aid of a particle of manure.

It is a matter of every-day experience with us, that rich land in Florida — whether virgin hammock or land made fertile by the addition of manure — is eminently adapted to the production of sugar-cane; but it remained to the enterprise and perseverance of Captain S. to demonstrate to us the practicability of growing this desirable object of culture profitably on exhausted old fields, five years in succession, not only without any diminution, but with a manifest improvement in the yield.

This presents a strong practical argument in favor of a rotation of crops, and forcibly establishes the inherent but hitherto overlooked capabilities of our worn lands on the River St. Johns, by proving that, however exhausted they may be by an unintermitting succession of corn and cotton crops, they still retain their pristine vigor in relation to sugar cane.

— *Jacksonville News.*

SORE TEATS IN COWS.

P. Hallock gives the following directions for the management of cows that have sore teats:—

"Take a full pail of cold water, and wash and rub the sores well. Use the whole pailful of water before milking, which cools the teats, or reduces the fever, and the cow will stand perfectly still. After milking, use half as much more cold water, cleansing the bag and teats well, and in a few days the sores will be healed. That is not all the good you will receive. You will have clean milk, and that is the way to have clean butter."

Fruit Trees for California. — It is stated in an exchange, that a very large invoice of fruit trees has been sent from New Jersey to California.

For the New England Farmer.

APPLES.

FALL SWEETINGS, — ROXBURY RUSSET, — LELAND PIPPIN.

MR. EDITOR: Being a subscriber to your valuable paper, and having a nursery of some twenty thousand fruit trees in various stages of growth, I should deem it a privilege to make some inquiries on the subject of fruits.

Among all the different kinds of fall sweet apples, which do you consider the *very best* for baking? There are many sweet apples that are large and handsome in appearance, which, in the process of cooking, will fall away and lose most of their rich saccharine flavor.

It is the opinion of many, that the Roxbury Russet is depreciating as to productiveness and quality of the fruit, yielding but a small proportion of fair marketable apples. Can you tell the cause, and propose a remedy? It is an apple valuable especially for its long keeping, which renders it desirable to retain the species. I have raised a Russet, for the last few years, varying somewhat in shape, which is more like that of the Baldwin, and the color of the skin seems to be a mingling of green and russet — flesh more juicy, not quite so acid, keeps about as long as the old Roxbury Russet, bears more abundantly, and the fruit is fairer, and quite as large. I think it is not the old English Russet. May it not be a cross between the Baldwin and Greening? It is different from the Red Russet which you have described in the last number of the Farmer, and also in your Fruit-Book.

I have seen statements of analyses of the wood of the apple and pear-tree, &c., but do not recollect of having seen accounts of experiments of the kind performed on the fruit. Now it appears to me quite as essential to understand the properties of which the fruit itself is composed, as it is that of the tree, in order to know how we may supply the soil where it may lack any specific properties that are essential to the growth and perfection of the fruit.

You speak of the Leland Pippin, or Leland Spice Apple, in your American Fruit-Book, as being an excellent apple, — and true it is. I have several trees in bearing, which were brought from Sherburne some twenty years since. With pretty good cultivation, they produce equal to the Baldwin, and fruit nearly as large. It is a fine apple, and many deem it *the best* of its season, which I think is longer than is named in your description, i. e., Sept. 15th and October. We have had them in use from 20th September till January, and have had good specimens in March.

Yours very respectfully,

JOB C. STONE.

SHREWSBURY, MASS., *April* 29, 1850.

REMARKS. — *Sweet Apples.* — In regard to apples, there is no point so unsettled as that relative to the best sweet apples. We have some forty or fifty on trial, and as our experiments on many of them are recent, we cannot decide on their merits, excepting as to their growth. Baked sweet apples are of very different texture. (See American Fruit-Book, p. 96.) Some are so soft, that they fall down flat when baked, and they mix with milk, forming a kind of porridge. These are of a fine texture for the dessert. Others are too hard when cooked. An intermedial kind, in texture, bake soft, but retain their form, even in slices when cut up. This is the kind for baking.

Fall Sweetings. — The Golden Sweet, often called Orange Sweet, which ripens the last of August, and continues through September, is excellent for baking. The Sassafras Sweet is said to be excellent for baking, but as we have had only a few specimens, we have not cooked them. It comes into use in September, and sometimes continues through the fall. The Pumpkin Sweet is an excellent baking apple, but a poor bearer. There are many other fall sweet apples of some notoriety, but their habits are not well known. Superb Sweet is one of the finest early fall sweet apples for the dessert, but it is probably too soft as a cooking apple to be used with milk.

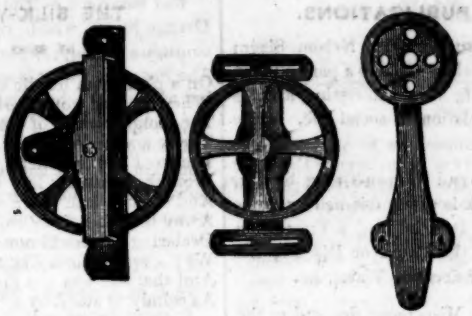
Roxbury Russet. — It is evident that this fruit does not flourish so well in this section as formerly, and many cultivators are discarding it; yet we think that this defect is not owing to any decline in this fruit, for it still flourishes well in new countries; but it is doubtless owing to our lands becoming old, and exhausted of some essential ingredients. If original forests were cleared off, and the land planted with this fruit, it would doubtless flourish as formerly. We often complain that fruit declines, when, in reality, the land declines, and the fruit declines only as a consequence of the declension of the land.

Analysis of Fruits. — This would be a nice business indeed for the chemist; and we doubt that he would determine what elements give to fruit its peculiar flavor and fine aroma, for these depend on properties remarkably evanescent and volatile, that are passing away with more rapidity than the man of science can produce his manipulations in his laboratory.

Leland Pippin is the standard name of this fruit, for under this appellation we first described and introduced it to public notice. We are aware that this fruit may be kept until winter, but we have observed that it loses its good qualities after October. It is usually disposed of in this market in September. This fruit is of a high quality, but rather too acid for the table, according to the taste of many. Those who like mild fruits would prefer Bars, Long Stem, Richardson, Garden Royal, and Magnolia, which are milder, and some of which ripen about the same time, and others earlier.

A NEW MANURE.

Robert Bryson, Esq., of Cumberland county, about eight miles from Harrisburg, has been experimenting for the last ten years, to make exhausted tan-bark available and valuable as a manure. Besides his magnificent farm, he likewise carries on the tanning business. Finally, after a great deal of expense and many failures, he has succeeded in discovering a method of producing from the tan an efficient manure. This is his plan: he has his tan wheeled out on a level piece of ground, and levelled off, two or three feet thick. Over this he spreads a layer of two or three inches of lime, and over that, again, a stratum of tan, then a layer of lime, and so on. He lets the bed, so prepared, remain for two years: at the end of that time he finds himself in possession of a bed of manure, the effects of which upon the land can hardly be surpassed for the richness of its product and the durable fertility which it imparts. — *Lancaster Co. (Pa.) Farmer.*



BARN-DOOR ROLLERS.

We would call the attention of farmers, who are building or repairing barns, to the valuable article represented by the above cuts. The cost of rollers is about the same as that of hinges, but they are far more substantial and durable; and as doors hung on them are less exposed to injury than those on hinges, of course they last much longer. A door sliding upon rollers is usually more convenient, especially when partially opened. Every farmer who has not this improvement should examine into its merits. "Economy is wealth."

For the New England Farmer.

CHERRY CULTURE.

"Don't talk of tree culture to me," says old Hunks. "It takes too long for 'em to grow; there's no use in trying to raise 'em; and then, the trees may all die, and you are no better off than you are now; or if they do live, a fellow may not live to get any good of 'em."

Now, in this matter we have only to say, that the growth of cherry-trees, under proper care, is very rapid. We can show, — and so we presume many others can, — from scions set in the spring of 1849, growths of more than *four feet* the following summer. We can also show scions set in 1848, as well set with fruit buds now, as you will find on any tree of twenty years' growth. We have seen trees grafted, near the ground, into stocks of not more than an inch and a half in diameter, in full bearing the third summer. And yet many will not put out cherry-trees because they do not expect to live to see them bear. Assure any of these individuals they will not live three years, and see the effect it would have upon them. They would probably think your words false, though they might not say so.

With regard to a loss of them, a tree is as sure to live and flourish as a horse or an ox. Care must be taken in both instances in order to insure success. But who ever stopped raising oxen, or horses, or hay, or grain, because they might not succeed? No provident man will do such things. Risks are necessary in any pursuit that is to result in success, and they are attended with less expense, and greater certainty, in trees, than almost any investment one can make.

Every man can raise his own trees. Sow the pits in autumn, and before the second following autumn is past, they may all be budded, or the third year they may all be ingrafted from bearing trees, which may, perhaps, result in earlier productiveness. So, in six years from the pit, the cultivator may begin to gather fruit. Six years! look back upon it and see how short a time; and how much of this time has been spent in whining over things that seemed impossible or impracticable? Enough in the latter to enable any one by well-applied industry, to fill his yards with choice fruits, and his field with productive orchards.

A cherry-tree! Why, it is a very model of beauty through its whole growth. If it had no other quality but its symmetry, it is well worthy of culture as a shade tree; but when to these graceful proportions, and its beautiful foliage, we can add the great amount of most healthful and delicious fruit it will yield, and continue to yield in greater quantities, only for the gathering, not only for one generation, but a long series of years, who can blame us for wondering that its cultivation is not universal?

W. B.

April 20, 1850.

LOW-HEADED FRUIT TREES.

By having low-headed fruit trees, the sun, which is, perhaps, in our hot and dry summers, the cause of more disease and destruction in fruit trees than all other diseases together, is kept from almost scalding the sap, as it does in long, naked trunks and limbs. The limbs and leaves of a tree should always effectually shade the trunk and keep it cool. The leaves, only, should have plenty of sun and light; they can bear and profit by it. If trees were suffered to branch out low, say within one or two feet of the ground, we should hear very much less of "fire-blight," "frozen sap-blight," black spots, and the like. The ground is always looser, moister, and cooler under a low-branching tree, than under a high one. Grass and weeds do not grow a hundredth part so rank and readily, and mulching becomes unnecessary. The wind has not half the power to rack, and twist, and break the tree, and shake off the fruit — a matter of no inconsiderable consequence. The trees will be much longer lived, and more prolific, beautiful, and profitable. The trees are more easily rid of destructive insects, the fruit is much less damaged by falling, and the facilities for gathering it are much greater; there is less danger in climbing, and less of breaking limbs. The trees require less pruning, and scraping, and washing; and the roots are protected from the plough, which is too often made to tear and mutilate them.

What an iron net is habit, and how securely it binds us in its folds!

NOTICES OF PUBLICATIONS.

THOUGHTS ON DOMESTIC LIFE, by Nelson Sizer: New York, Fowlers & Wells.—This is a pamphlet of 48 pages 12mo., containing very interesting articles on several subjects in relation to social life. Price 12½ cts.

AN INTRODUCTION TO THE WATER-CURE, by Dr. T. L. Nichols.—This work is also published by Fowlers & Wells, at 12½ cts. It is, in brief, a Treatise on the Condition of Health, the Cause of Disease, the Properties and Remedial Effects of Water, &c.

THE STUDENT, a Family Miscellany, devoted to the Moral, Intellectual, and Physical Improvement of Youth. Monthly, at $1 00 per year. Fowlers & Wells, publishers.—The first number indicates that this will be a very interesting and instructive work.

THE CULTURE OF THE CARROT, AND MANUFACTURE OF PATENT WOAD.—This is a small pamphlet, by C. Farmer, Ellington, Ct., who has a patent right for making woad of carrots; and this work contains certificates showing the success and utility of the process. They also show that this patent woad is superior to the foreign. We would call the attention of dyers to the subject. It is also worthy the attention of those cultivators who would give their attention to the investigation of new subjects.

ACKNOWLEDGMENTS.

Mr. Nourse, the publisher of the Farmer, gratefully acknowledges the receipt of a fine pair of Bolton Gray fowls, from Master George Dorr. These fowls are from the choice stock exhibited by Mr. James Dorr, of Dorchester, at the poultry fair last fall, which was regarded by competent judges as pure, and among the finest in the country. We trust that those who have purchased eggs from this stock will find that they produce fowls true to their name, and a valuable breed.

Of Master H. B. Coffin, Newton, a dozen of eggs of the Guelderland fowls. These eggs are remarkably large, which property is peculiar to the eggs of this breed. They are from stock imported by Capt. Devereux, of Marblehead,—the pure race.

From Wm. O. H. Gwynneth, Portland, Me., scions of the Baldwin apple, cut thirteen months since, by J. Larrabee. They appear remarkably fresh and fine; and Mr. L. will oblige us by giving his mode of keeping scions so long in fine condition.

HORTICULTURAL SOCIETY.—A gentleman of this city, of fine taste and considerable experience in the culture of trees and flowers, has suggested the propriety of forming a City Society, for the purpose of enlarging the amount of knowledge on those subjects, by mutual conversation, and adding to the beauty and health of our city, by exciting more attention to culture of trees and flowers.

Will some one propose a plan?—*Granite Farmer.*

THE SILK-WORM'S WILL.

BY MISS H. F. GOULD.

On a plain rush hurdle a silk-worm lay,
When a proud young princess came that way;
The haughty child of a human king
Threw a sidelong glance at the humble thing,
That took, with a silent gratitude,
From the mulberry leaf her simple food,
And shrunk, half scorn and half disgust,
Away from her sister child of dust;
Declaring she could never see
Why a reptile form like this should be,
And that she was not made of nerves so firm,
As calmly to stand by a "crawling worm."

With mute forbearance the silk-worm took
The taunting words and the spurning look.
Alike a stranger to self and pride,
She'd no disquiet from aught beside,
And lived of a meekness and peace possessed,
Which these debar from the human breast.
She only wished for the harsh abuse
To find some way to become of use
To the haughty daughter of lordly man;
And thus did she lay a noble plan
To teach her wisdom, and make it plain
That the humble worm was not made in vain—
A plan so generous, deep, and high,
That to carry it out she must even die.

"No more," said she, "will I drink or eat!
I'll spin and weave me a winding-sheet,
To wrap me up from the sun's clear light,
And hide my form from her wounded sight.
In secret then till my end draws nigh,
I'll toil for her; and when I die,
I'll leave behind, as a farewell boon,
To the proud young princess, my whole cocoon,
To be reeled and wove to a shining lace,
And hung in a veil o'er her scornful face!
And when she can calmly draw her breath
Thro' the very threads that have caused my death,
When she finds at length she has nerves so firm
As to wear the shroud of a crawling worm,
May she bear in mind, that she walks with pride
In the winding-sheet where the silk-worm died!"

We do not always converse with reason, to learn what we ought to do; but it is good to learn sometimes what we ought to avoid.

Wisdom is not always grave, nor folly gay.

Industry and perseverance merit success.

TERMS.—THE NEW ENGLAND FARMER is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be elegantly bound in muslin, embossed and gilt, at 25 cents a volume, if left at this office. As it is stereotyped, back numbers can be furnished to new subscribers.

☞ THE POSTAGE ☜

On this paper is only 1 cent, or 26 cents a year, within the state, or within 100 miles out of the state; and 1½ cents, or 39 cents a year, beyond those distances.

STEREOTYPED AT THE
BOSTON STEREOTYPE FOUNDRY.